

REMARKS

This application has been reviewed in light of the Office Action dated July 19, 2004. Claims 56-73 are presented for examination, of which Claims 56, 58, 65, and 67 are in independent form. Claims 56, 58, 65 and 67 have been amended to define still more clearly what Applicant regards as his invention. Favorable reconsideration is requested.

Claims 56-60 and 65-59 were rejected under 35 U.S.C. § 102(b) as being anticipated by WIPO Publication WO 97/36453 (Hodgkinson). Claims 61-64 and 70-73 were rejected under 35 U.S.C. § 103(a) as being obvious from *Hodgkinson* in view of U.S. Patent 5,864,738 (Kessler et al.).

Independent Claim 56 is directed to a sending method, of sending a data packet from a source node to a destination node through a switching network, the data packet including user data and additional data. That method comprises defining a path to be followed on the network by the data packet, independently from the transmission mode of the data packet, connected or non-connected. A virtual channel representing a connection between the source node and the destination node, is selected, and the data packet is sent with additional data, the additional data comprising the defined path, the selected virtual channel and an identifier of the source node. Also, according to Claim 56, the combination of the virtual channel and the source node identifier makes the connection unique in the switching network, and wherein data representing at least one of the virtual channel and the source node identifier allows the destination node to determine the transmission mode of the data packet, connected or non-connected.

Independent Claim 58 is directed to a reception method of receiving a data packet transmitted from a source node to a destination node through a switching network, the switching network being adapted to carry data in a connected mode and a non-

connected mode, the data packet including user data and additional data. The reception method of Claim 58 comprises reading the additional data, the additional data comprising a defined path for the data packet on the network, the selected virtual channel and the source node identifier. The transmission mode of the data packet, connected or non-connected, is determined on the basis of data representing at least one of the virtual channel and the source node identifier, where the packet routes in the switching network according to the same defined path whatever the determined transmission mode.

The prior art relied upon by the Examiner has been discussed adequately in previous papers, and it is not deemed necessary to repeat that discussion in full.

As has been discussed previously, *Hodgkinson* relates to a method of transmitting an asynchronous transfer mode (ATM) cell over an ATM network. A Payload Type (PT) field is added to the header that accompanies data being transmitted. The other fields may include VPI and VCI data (see page 5, lines 9-12). Importantly, when the data enters a switch node, the node reads the PT field in order to determine whether a connectionless service is required or not (see page 11, lines 6-9 and 17-28). Depending on the transmission mode that is determined based on the PT field (see step 221 in Fig. 7) (i.e., connected or non-connected) the path to be followed by the packet in the network is defined accordingly.

More particularly, when the determined mode is the connected mode, then the VPI and VCI fields are used (steps 222, 223 and 224 in Fig. 7) to define the path, while where the connectionless mode is determined, then the source and destination addresses are used to define the path to be followed (steps 230-233 in Fig. 7).

Thus, in *Hodgkinson*, the path to be followed by the data packet *is defined in accordance with the determined transmission mode of the data packet.*

In a method according to either Claim 56 or 58, a source routing mechanism is implemented at the source node in the packets being sent, regardless of the transmission mode of the data packet. The source routing mechanism consists in determining the route for the packet at the source node, after which the packet is sent over the network, along with all the addresses of the switch nodes that are encountered by the packet on its path. Those claims do not recite knowing the transmission mode of the packet in advance, as in *Hodgkinson*, nor is there any need for such advance knowledge. Moreover, nothing in *Hodgkinson* is seen to teach or suggest any arrangement in which the source routing is performed regardless of transmission mode, as recited in Claims 56 and 58, respectively. For at least that reason, both Claims are believed to be clearly allowable over *Hodgkinson*.

Moreover, according to Claims 56 and 58, among the additional data representing at least one of the virtual channel and the source node identifier allows the destination node to determine the transmission mode of the data packet. In the *Hodgkinson* apparatus, in contrast, the virtual channel and the source node identifier enable definition of the path as explained above and not require to determine the transmission mode of the packet. That is, the determination of the transmission mode is effected in *Hodgkinson* by means of the PT field, which represents additional data that is different from the virtual channel and the source node identifier (as recognized by the Examiner at pag 2 of the Office Action -- "sending the data packet *with VPI/VCI, PT, OS, SA, DA* (additional data)... [emphasis added]").

Again, Claim 56 recites that the combination of the virtual channel and the source node identifier makes the connection unique in the switching network. Both of these pieces of information are necessary when two or more data user streams are sent from different source nodes, and it is required to differentiate between the different user data

streams received by the destination node. In the *Hodgkinson* network, in contrast, there is a centralized management according to which all the virtual channels that are used to transmit data are uniquely defined by their number, once and for all, and thus the connection in *Hodgkinson* is made unique only by the virtual channel number.

For all these reasons, Claims 56 and 58 are deemed to be clearly allowable over *Hodgkinson*.

Claims 65 and 67 are corresponding apparatus claims, and are allowable by virtue of at least the reasons presented above with regard to method Claims 56 and 58, respectively.

A review of the other art of record, including *Kessler*, has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

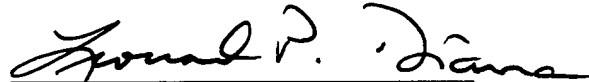
This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, the Examiner is

respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Leonard P. Diana", written over a horizontal line.

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